





Galaxy

galaxy.uni-freiburg.de usegalaxy.org



GALAXY

Team Members:

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Project Type:

Control System Integration in Galaxy

Open Data:

Generating Open Data sets - Microscopy

Application Type:

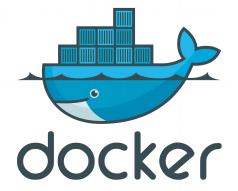
Data Processing Pipeline



About Galaxy

- 900 Bioinformatics Tools
- 100,000 Jobs
- 200 Users
- 2K cores
- 1TB RAM







Use Case - Automating Science

Automated Microscope

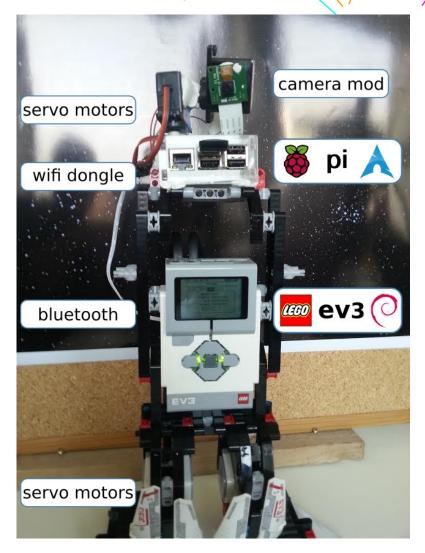
- take an image
- push this to galaxy, perform image processing on a cluster
- extract parameters for Microscope
- take a new image with parameters; REPEAT

CleanLab - Automated Experiments

- for an environment dangerous to humans
- a robot's hands are cleaner than a (dirty) biologists

giving galaxy hands



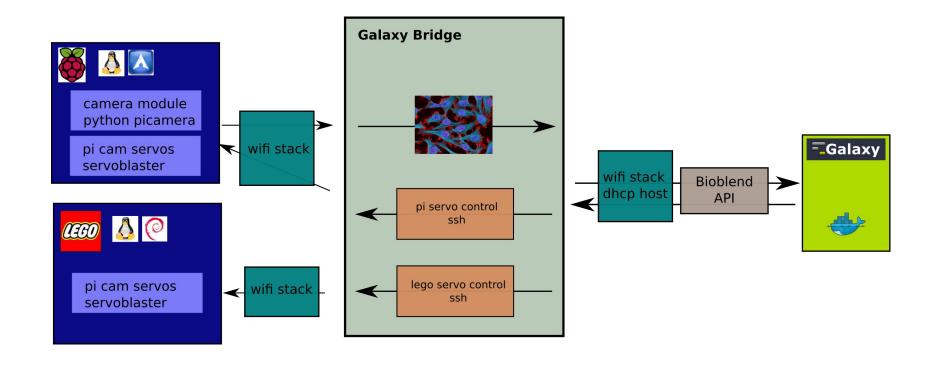


Meet Eve – our "Macroscope"

paramiko
LibreOffice OpenCV
python-ev3 ev3dev
Python

servoblaster SSH
GitHub trello Inkscape
NumPy Debian GNU/Linux
SciPy matplotlib
scikit-image
Arch Linux ARM





github.com/bgruening/hackathonfr